NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

SHALLOW WATER MANAGEMENT FOR WILDLIFE
(acre)
CODE 646

DEFINITION

Managing shallow water on agricultural lands and moist soil areas for wildlife habitat.

PURPOSE

- To provide open water areas on agricultural fields and moist soil areas to facilitate waterfowl resting and feeding.
- To provide habitat for reptiles and amphibians and other aquatic species which serve as important prey species for waterfowl, raptors, herons, and other wildlife.

CONDITIONS WHERE PRACTICE APPLIES

On agricultural and moist soil areas where water can be impounded or regulated by diking, ditching, or flooding.

This practice can be used to facilitate the conservation of declining wetland dependent and threatened and endangered species.

This practice does not apply to: Wetland Restoration (657) intended to rehabilitate a degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to original conditions; Wetland Enhancement (659) intended to rehabilitate a degraded wetland where specific functions and/or values are enhanced beyond original conditions; or Wetland Creation (658) for creating a wetland on a site which was formerly a wetland but will be replaced with a wetland type not naturally occurring on the site.

CRITERIA

- Soils should have low permeability or high water table to inhibit subsurface drainage and allow for maintenance of proper water levels.
- Shallow water impoundments require an adequate water supply for reflooding and a water control structure for removing when necessary.
- Landowner shall obtain all local, state, and federal permits necessary.
- Water rights must be assured.
- The Standards and Specifications for Dike (356), Pumping Plant for Water Control (533), and Structure for Water Control (587) will be used as appropriate. Refer to Engineering Field Manual Chapter 6, "Structures," for additional design information. Existing drainage systems will be utilized, removed, or modified as needed to achieve the intended purpose.

CONSIDERATIONS

To insure that foods are available to dabbling ducks, impoundments should be gradually flooded to an average depth of 6 - 10 inches.

Consider the effects of the timing of the flooding and drawdown, as well as the type of drawdown, on plant species composition (moist soil areas).

Consider the plant species flooding tolerances and the composition of seed in the soil at the site (moist soil areas).

Consider effects on wetlands or wildlife habitats that would be associated with the practice.

Consider the effects of residual herbicide (moist soil areas).

Consider the targeted plant species; tolerances with respect to timing and type of drawdown.

Consider effects on movement of dissolved substances to groundwater and to downstream surface waters.
Consider effects on downstream flows that would affect other water uses or users.

PLANS AND SPECIFICATIONS

Plans and Specifications for installing structures for water control shall be in keeping with this standard and shall prescribe the requirements for applying the practice to achieve its intended purpose.

OPERATION AND MAINTENANCE

The impoundment should be dewatered and disked or burned at 2 to 3 year intervals to control the invasion by undesirable plants.

The following actions shall be carried out to insure that this practice functions as intended throughout its expected life.

These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance):

Any use of fertilizers, mechanical treatments, prescribed burning, pesticides, grazing, haying, and other chemicals to assure the shallow water or moist soil area function shall not compromise the intended purpose.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible.

Operation and maintenance shall include monitoring and management of the site as well as structural components.